

Hierarchical Network of Tacit Knowledge for the Acceleration of Sustainable Global Innovation

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Abstract

This paper describes a novel scheme of tacit network that accelerates sustainable global innovation. Five years ago, the author proposed a unique concept and structure named “GVIN (Global Ventures Industries Network)”. The GVIN was actually realized as a business model to help global ventures to find best global partners, by forming a value chain - hierarchical small network of knowledge, especially tacit knowledge, on both seeds and needs sides.

The author has been involved in the actual business operation of GVIN for the last 3 years. Through his empirical observation and analysis, the paper describes how such “tacit knowledge” can effectively transfers through hierarchical small network of tacit knowledge.

Key words

tacit knowledge, hierarchical network, small network, innovation, human network, GVIN, Ba

Hierarchical Network of Knowledge

In order to accelerate innovation, it is very important to achieve the “direct face-to-face” meeting between the needs holders and seeds holders. Especially in the case of GVIN concept, it is imperative that a top level meeting takes place at the early phase, so that the decision to use the technology of the venture or not can be made speedily and correctly. It will take a long time or never succeed if only middle or lower level managers or engineers are involved. However, it was empirically evident that this kind of middle and lower level networks truly help to realize innovation, when top

level network exists. Also, it is true that top level network will work smoothly when middle and lower level networks exist.

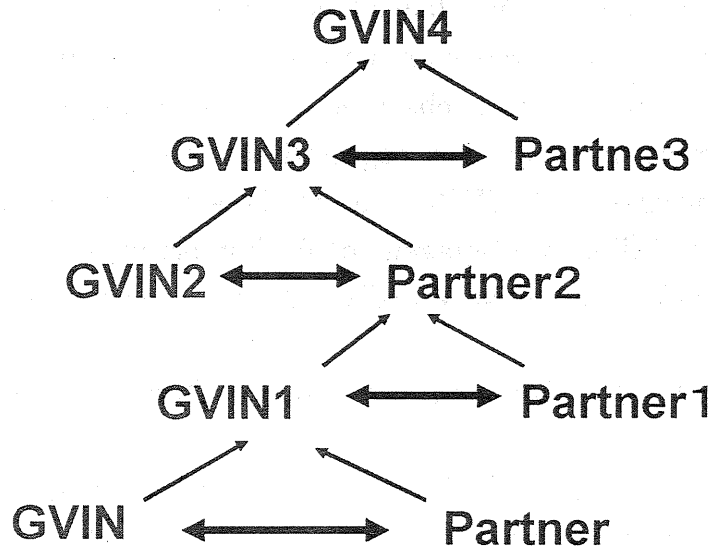
The author found out that some sort of hierarchical structure, especially in the form of tacit knowledge-based small network - existing among these different level of persons are necessary, helpful and effective to accelerate innovation. Also, it was observed that such hierarchical tacit human network existing on seeds side, especially among ventures, venture capitals, angels, ventures and GVIN. On needs side, among corporate companies, GVIN, FMT (Forum Management for Tomorrow, Inc.), it is true that some hierarchical human network really helps to accelerate innovation.

Innovation Spiral of Hierarchical Small Network of Tacit Knowledge

The author found out that small network of tacit knowledge will grow day by day, by achieving one innovation after another. That is, when one venture successfully made a closing deal with a global corporate company, then GVIN will extend its human network through various levels of persons in corporate companies, as well as ventures and venture capitals. Also, this human network will form a hierarchical structure, so that all persons involved in the innovation are effectively linked into a hierarchical tree. And this tree will be the base of the next innovation, and so on.

In this way, the knowledge network will gradually grow so that undisrupted and continuous – sustainable - innovations can be achievable. Of course, some old knowledge will become obsolete, quite quickly, but the growing network is suitable for the realization of sustainable innovation. (Fig. 1)

Fig. 1 Innovation Spiral



References

- (1) Yutaka Kuwahara, "Acceleration of Global Innovation through Tacit Knowledge-based Small Network", 2005 PICMET Aug 2005, Portland
- (2) Yutaka Kuwahara, "A New Scheme of Network for Innovation (GVIN) Connecting Global Ventures and Japanese Industries", 2nd IEF, September 2002, Beijing
- (3) Yutaka Kuwahara, "What is Management of Technology (MOT)", published by Maruzen Book Publishing Company, Feb. 2004
- (4) Yutaka Kuwahara, "Essentials and Direction of Management of Technology", published by Maruzen Book Publishing Company, June. 2006
- (5) Ikujiro Nonaka, et al "Essentials of Innovation", 1994
- (6) Ikujiro Nonaka, Hirotaka Takeuchi, Katsuhiko Umemoto, "Knowledge Creating Company", Toyo-Keizai, 1996
- (7) Clayton M. Christensen, "Innovator's Dilemma", Harvard Business School Press, 1997
- (8) Thomas H Davenport, Lawrence Pullsack, "Working Knowledge", Productivity Center, 2.001